



**INSTRUCTIONS & RECOMMENDATIONS
FOR SAFE USE OF LARGE DIAMETER AND ASSEMBLY TYPE ROUTER BITS**

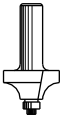
THANK YOU FOR PURCHASING ANOTHER TOP-QUALITY AMANA TOOL® ROUTER BIT. ROUTER BITS & CUTTING TOOLS CAN BE DANGEROUS WHEN IMPROPERLY USED, SO PLEASE READ AND FULLY UNDERSTAND THE FOLLOWING GUIDELINES BEFORE USING THIS TOOL:

1. Routers Only



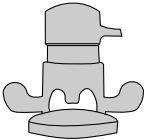
Router bits are designed to use in portable or stationary routing machines only. Do not use router bits in any other equipment such as drill press, portable electric drill, cordless drill, die grinder, milling machine, etc.

2. Inspection



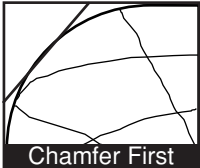
You should always inspect any cutting tool (new or used) before using. Ensure that all hardware (allen screws, hex nuts, collars, etc.) are properly tightened and that ball bearings (if so equipped) rotate freely. Do not use any cutting tool if there is evidence that the carbide is chipped or cracked or if the tool appears imbalanced. This procedure is especially important after the tool has been re-sharpened.

3. Multi Speed



For the highest quality cut and safest operation, a variable speed router with a horsepower rating of two or higher is recommended. If using a multi-speed router, use the slow or medium speed setting (see RPM chart). The overall performance and quality of cut depends on speed (RPM), feed-rate, material type and amount of material being removed. Adjustments can be made to provide the desired finish of cut. Some multi-speed routers utilize a 'soft start' feature which slowly increases R.P.M. speed when the router is switched on. This feature reduces start-up reaction torque, particularly when using larger diameter router bits. Follow router manufacturers instructions for the safest use of the particular router you are using.

4. Excess Material



Chamfer First

For large cuts, it is advisable to first remove as much material as possible prior to using the large bit. For example, if using 1-1/2" radius corner round bit (#49526), start off using several passes or a smaller radius, or bevel the material with a table saw, etc. For large dado type cut, consider using alternative methods, such as a table saw with a dado set, instead of a large router bit.

5. Sub-Base

When installing the router bit into the router or shaper collet, be sure the tool is straight and firmly tightened. Also, the base or sub-base should be large enough to accommodate the diameter of the tool you are using. Always use a properly designed sub-base with your router. Using the base without the sub-base does not provide enough stability for the router.

6. Collets



Proper router collets are essential to safe routing. Worn, scored or out-of-round router collets do not provide adequate holding power and will increase run-out and vibration. Multiply these factors by the router R.P.M. (22,000 and greater), and you will realize why we must emphasize the importance of proper router collet condition. Do not assume that new collets are geometrically correct. Dark marks or grooves in the router bit shank usually indicate slippage and a worn collet, which should be replaced immediately.

ROUTER BIT SHANKS SHOULD BE COMPLETELY INSERTED INTO THE COLLET AND BACKED OFF SLIGHTLY (APPROX. 1/16"). NEVER PARTIALLY INSERT THE BIT INTO THE COLLET. DO NOT USE REDUCING SLEEVES BUT, RATHER, THE CORRECT SIZE COLLET.

7. Sharpen

The same way you would not drive your car with flat tires, do not use a dull router bit. This results in a poor quality cut, excessive vibration, burning of the wood, and possible chipping or breaking of the router bit. Sharp tools cut smoother, faster and with less strain on both the router and the operator. Always have your cutting tools professionally re-sharpened by a reputable grinding firm. Again, re-inspect your cutting tool for cracks, chips, loose hardware & bearings, etc. before using.

8. Router Table



Where applicable, it is recommended that you use a high quality router table. This is especially useful and safer for panel raising, stile & rail door cutting, etc. Except when securely fastened to a sturdy, high-quality router table, never use a portable router "free-hand" in an upside-down (inverted) manner.

9. Start up

Never start nor stop the router while the cutting tool is touching anything, including the workpiece.

10. Vibration

If there is any indication of vibration, immediately turn off and unplug the router and carefully inspect the router, spindle, collet, cutting tool, table, clamps, etc. Do not proceed until the condition has been properly identified and corrected.

11. Power Off



Unplug router and or machine before changing tooling.

12. Max. RPM Table

MAX RPM WARNING:

Do not exceed the maximum RPM shown for the particular tool you are using.

Max RPM for symmetrical tool only!

MAX RPM	DIA. INCHES	DIA. MM
28,000	< 2"	50mm
22,000	2" – 2-3/8"	50-60mm
19,000	2-3/8" – 2-3/4"	60-70mm
16,000	2-3/4" – 3-1/4"	70-80mm
15,000	3-1/4" – 3-5/8"	80-90mm
13,000	3-5/8" – 4"	90-100mm

This table is only recommendation.

13. Safety



WARNING:

Carbide cutting tips may chip or fragment during use. Always use machine guards and wear proper eye protection while operating routers and machinery. Keep hands clear of cutting area. Collet integrity and usage is extremely important to safety and longer tool life. Please refer to your Router Owners Manuals for further information.

14. Notice

Grinding of this product will produce dust of potentially hazardous ingredients. Use adequate ventilation and read M.S.D.S. (Material Safety Data Sheet).

NOTE: THIS GUIDE IS INTENDED FOR GENERAL SAFETY INFORMATION ONLY AND SHOULD NOT BE CONSIDERED A SUBSTITUTE FOR YOUR POWER TOOL OWNERS MANUAL, NOR A GUIDE TO SAFE WOODWORKING PRACTICES. PLEASE CONSULT OTHER APPROPRIATE REFERENCE MATERIALS.

AMANA TOOL® CORP., FARMINGDALE, NY

NOTE: IF YOU SHOULD HAVE ANY QUESTIONS, PLEASE CALL

THE AMANA TOOL® TECHNICAL HOT-LINE @ 800-445-0077. M-F, 9 AM TO 5 PM, EST.

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